

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A process for producing adamantanes by isomerizing a tricyclic saturated hydrocarbon compound having 10 or more carbon atoms, wherein the process comprises: (A) ~~a reaction step for isomerizing a raw material~~ in the presence of a zeolite catalyst supported by at least one metal selected from metals of group VIII to group X of the periodic table in a ion-exchange method or impregnation method, in the absence of hydrogen chloride; (B) ~~a concentration step for concentrating the adamantanes in a reaction product liquid~~; (C) ~~a crystallization step for crystallizing the concentrated adamantanes~~; (D) ~~a solid-liquid separation step for separating crystallized adamantanes from slurry having precipitated crystals~~; (E) ~~a washing step for washing the crystal of adamantanes obtained by the solid-liquid separation step~~; and (F) ~~a drying step for drying the washed crystals of adamantanes~~.

2. The process for producing adamantanes according to Claim 1, wherein the tricyclic saturated hydrocarbon compound having 10 or more carbon atoms is a compound obtained by hydrogenation of a tricyclic unsaturated hydrocarbon compound having 10 or more carbon atoms.

Claim 3 (Cancelled).

4. (Original) The process for producing adamantanes according to Claim 1, wherein a flash tower or a distillation column singly or a plurality thereof in combination are used for concentration treatment in the concentration step, and at least a part of a column-top distillate is reused as a solvent in the reaction step, or at least a part of the column-top distillate is used as a recrystallization solvent in the crystallization step.

5. (Original) The process for producing adamantanes according to Claim 1, wherein cooling crystallization, evaporative crystallization, or the combination thereof are used for the crystallization operation in the crystallization step.

6. (Original) The process for producing adamantanes according to Claim 1, wherein a recrystallization step and a re-washing step are provided between the solid-liquid separation step or the washing step and the drying step, and at least a part of a mother liquor formed in these steps is reused by recirculating as a part of the solvent or the raw material in the reaction step, or by recirculating to the concentration step or to the crystallization step.

7. (Original) The process for producing adamantanes according to Claim 1, wherein the reaction step, concentration step, crystallization step, and solid-liquid separation step are operated using either a batch-wise system or a continuous system.

8. (Currently Amended) A process for producing adamantanes, wherein the adamantanes produced by isomerizing a tricyclic saturated hydrocarbon compound having 10 or more carbon atoms in the presence of ~~a solid catalyst~~ a zeolite catalyst supported by at least one metal selected from metals of group VIII to group X of the periodic table in a ion-exchange method or impregnation method, in the absence of hydrogen chloride and concentrating a reaction product liquid to an adamantane concentration of from 10 to 50% by mass are purified by a crystallization, the crystallization comprising continuously or batch-wise crystallization or evaporative crystallization at a temperature of from -20 to 50°C operation.

Claims 9-11 (Cancelled).

12. (Currently Amended) A process for producing adamantanes, wherein crude adamantanes produced by isomerizing a tricyclic saturated hydrocarbon compound having 10 or more carbon atoms in the presence of a zeolite catalyst supported by at least one metal selected

from metals of group VIII to group X of the periodic table in a ion-exchange method or impregnation method, in the absence of hydrogen chloride are washed by at least a washing solvent selected from the group consisting of alcohol, ketone and carboxylic acids having a boiling point of 150°C or less in an amount of from 10 to 300% by mass relative to crude adamantane or in an amount of 100 to 500% by mass used to make a slurry, which is then filtered after separating the adamantanes by a crystallization step and a solid-liquid separation step.

13. (Original) The process for producing adamantanes according to Claim 12, wherein the tricyclic saturated hydrocarbon compound having 10 or more carbon atoms refers to trimethylenenorbornane.

Claims 14-16 (Cancelled)

17. (Currently Amended) A process for producing adamantanes, wherein the adamantanes are produced by isomerizing a tricyclic saturated hydrocarbon compound having 10 or more carbon atoms in the presence of a zeolite catalyst supported by at least one metal selected from metals of group VIII to group X of the periodic table in a ion-exchange method or impregnation method, in the absence of hydrogen chloride, wherein crystals of the adamantanes containing a liquid fraction in the range from 5 to 50% by mass are dried by stirring, shaking, or stirring and shaking.

18. (Original) The process for producing adamantanes according to Claim 17, wherein the tricyclic saturated hydrocarbon compound having 10 or more carbon atoms refers to trimethylenenorbornane.

19. (Original) The process for producing adamantanes according to Claim 17, wherein the adamantanes are dried by at least a method selected from the group consisting of convective drying method, radiative drying method, and conductive drying method.

20. (Original) The process for producing adamantanes according to Claim 17, wherein drying is performed by either a continuous system or a batch-wise system.

21. (Original) The process for producing adamantanes according to Claim 17, wherein the drying is performed under the conditions including a pressure in the range from 0.1 to 101 kPa, a temperature in the range from the boiling point of the washing solvent minus 50°C to the boiling point of the solvent.

Claim 22 (Cancelled)